

Post-doc position available at Cemagref - Montpellier (France)

A post-doc research position is available at the Cemagref Montpellier research centre. The starting date is as soon as possible in 2nd term 2003, and the first candidate with relevant skills will be selected.

The position is available for 18 months (one year and a half). The successful applicant is expected to work in the Spatial Structure and Systems Laboratory (UMR-3S), on the development of change detection techniques for low resolution data and the test of their applicability to European and boreal forest areas.

More precisely, the position is opened in the framework of a project funded by the French Ministry of Research, and entitled "MULTI-SCALE AND MULTI-TEMPORAL ANALYSIS of SPATIAL IMAGERY AND APPLICATION TO MANAGEMENT AND CONTROL MISSIONS OVER FOREST AREAS" (project acronym METIS). The laboratory has developed a robust method of change detection based on high resolution optical data which has proved operational for the mapping of forest management operations and forest damages (insect defoliation, windstorm damages). The proposed work consists in developing a similar method for low resolution data (mainly Vegetation, Modis and Meris) and test its interest in boreal situations (Siberia) and temperate ones (e.g. Landes, France).

The main tasks will be:

- to synthesise the state of art in this domain, and propose a list of preprocessing (e.g. geometric, atmospheric, BRDF) and processing modules for carrying out the task ;
- to identify algorithms/modules developed by other teams and which could be tested for their adequation to the task ;
- to develop specific components of the method when existing ones are not adapted ;
- to test the modules and the whole method on the boreal and European temperate test-sites.

This position would fit a person possessing a PhD and with high skills in image processing (preferably with low resolution data), in computer programming (C/C++, Java, object-oriented approach, data base). An experience in a forest or agricultural context would be an advantage. The work will be carried out in a French environment, with reports and publications in French and English. However the application of a good candidate with an excellent level of English and an elementary knowledge of French will be considered.

The work will be carried out in close cooperation with several French laboratories, particularly the ones hosted in the Maison de la Télédétection, in Montpellier (<http://www.teledetection.fr/index.html>), and CESBIO, Toulouse, and with the Russian Space Research Institute (Moscow).

Applicants are required to first send a curriculum vitae (in French or English), a letter summarizing interest and background, and the names and contact information for 2 potential references to Dr Michel Deshayes, <mailto:deshayes@teledetection.fr>

The general information (in French only) regarding post-doc positions at Cemagref can be found at: <http://www.cemagref.fr/Informations/Actualites/postDoc/postdoc.htm>.

The raw salary amounts to 2150 Euros/month.

Dr Michel Deshayes

Chief Forest Engineer (ICGREF)

Applications of Remote Sensing and GIS to forests and natural areas

UMR Cemagref-ENGREF 3S (Structures et Systèmes Spatiaux) Maison de la
Te'l'e'de'tection 500, rue JF Breton F-34 093 Montpellier Cedex 5 - France

National / Tel : 04 67 54 -87 51 dir; -87 54 sec. Fax : -87 00 Internl / Tel.: +33 4 67 54 -
87 51 dir; -87 54 sec. Fax: -87 00

Web: <http://www.teledetection.fr/>

<http://www.cemagref.fr/English/index.htm>

Cemagref = French Institute of agricultural and
environmental engineering research

Michel Deshayes

Tel (+33) (0)4 67 54 87 51 direct

(+33) (0)4 67 54 87 54 sec.

Fax (+33) (0)4 67 54 87 00

<mailto:michel.deshayes@teledetection.fr>